

LISTING OF THE CLAIMS

This listing of claims replaces all prior claim versions and listings in the application:

1. (Currently Amended) A flanged member adapted configured to be included as a first flanged member in a flanged joint in a pressure equipment device, the flanged joint comprising the first flanged member and a corresponding second flanged member with a second flanged end having a second end surface, said first flanged member comprising:

a first flanged end with a first end surface forming configured to face the second end surface of the second flanged end of the second flanged member of said flanged joint, said first end surface comprising a first load transferring surface through which forces are transferred when assembled together with ~~[[a]]~~ said corresponding end surface of a flanged end of a second flanged member of said flanged joint;

at least a portion of said first end load transferring surface in an unstressed condition being concave in a radial direction, such that said at least the portion of said first end load transferring surface is curved and defined by a concave curve function,

wherein said first end load transferring surface is concave in the radial direction over at least an area that is subjected to deformation when the first flanged member is assembled together with said second flanged member, and in the unstressed condition, a proximal point on the at least the portion of said first end load transferring surface and a distal point of the at least the portion of said first end load transferring surface meet a plane inclined in the radial direction of said first flanged member,

wherein said load transferring surface has an outermost abutment point in a cross section of the first flanged member, the outermost abutment point configured to abut against the second end surface of the second flanged member when assembled together with said corresponding second flange member, the outermost abutment point being the abutment point situated farthest in the radial direction from the central axis of the first flanged member,

said load transferring surface has an innermost abutment point in a cross section of the first flanged member, the innermost abutment point configured to abut against the second end surface of the second flanged member when assembled together with said corresponding second

flange member, the innermost abutment point being the abutment point situated nearest in the radial direction from the central axis of the first flanged member; and

a boring passing through the first end surface at a radial distance from a central axis of the first flanged member greater than the radial distance from the central axis of the first flanged member to the innermost abutment point, and less than the radial distance from the central axis of the first flanged member to the outermost abutment point.

2. (Currently Amended) The flanged member according to claim 1, wherein said first end load transferring surface is concave over the entire extension thereof in the radial direction.

3. - 4. (Canceled)

5. (Currently Amended) The flanged member according to claim 1, wherein said first end load transferring surface comprises a varyingly concave surface in the radial direction.

6. (Currently Amended) The flanged member according to claim 1, said first flanged member further comprising an internal[[.]] axial through[[.]] axial opening, said first end load transferring surface having [[an]] said innermost abutment point configured to abut against the corresponding second end surface of said second flanged member, said abutment point being situated nearest in the radial direction, to said opening, the concavity of the first end load transferring surface extending all the way in to said abutment point.

7. (Currently Amended) The flanged member according to claim 1, wherein said first end load transferring surface has [[an]] said innermost abutment point configured to abut against the corresponding second end surface of said second flanged member at an internal[[.]] axial through[[.]] axial opening of said second flanged member, said innermost abutment point being situated nearest in the radial direction, to said opening, the concavity of the first end load transferring surface extending all the way in to said abutment point.

8. (Currently Amended) The flanged member according to claim 1, wherein a conceived straight line (X) that connects ~~an innermost~~ said proximal point (a) of said first ~~end~~ load transferring surface, in the radial direction, with ~~an outermost~~ said distal point (b) thereof, in the radial direction, has a length Lx and the concavity of ~~the end~~ said first load transferring surface has a maximum depth Dk in relation to a conceived plane surface produced by said line (X), which depth Dk is of the order of 0.01 %-2 % of Lx.

9. (Canceled)

10. (Currently Amended) The flanged member according to claim 1, wherein at least a part of a transition area, between a surface of the first flanged end directed away from said first end surface and a part of the first flanged member that is substantially parallel to a longitudinal axis of the first flanged member, is shaped as a substantially elliptical area.

11. (Currently Amended) A joint comprising ~~two a first flanged members member and a~~ second flanged member adapted for a pressure equipment device, said ~~two first and second~~ flanged members each comprising:

at least one flanged end having an end surface ~~forming comprising~~ a load transferring surface through which forces are transferred when connecting together said ~~two first and second~~ flanged members in an assembled state, such that in the assembled state said ~~end surfaces face each other~~ each load transferring surface faces the other load transferring surface,

wherein, for ~~at least one of said two~~ the first flanged members member, at least a portion of the ~~end~~ load transferring surface in an unstressed condition is concave in a radial direction, such that ~~the at least the portion of the end~~ load transferring surface is defined by a concave curve function, said ~~first end~~ load transferring surface is concave in the radial direction over at least an area that is subjected to deformation when the first flanged member is assembled together with said second flanged member, and a proximal point on the at least the portion of said ~~first end~~ load transferring surface and a distal point of the at least the portion of said ~~first end~~ load transferring surface meeting a plane inclined in the radial direction of said flanged member,

wherein said load transferring surface has an outermost abutment point in a cross section of the first flanged member, the outermost abutment point configured to abut against the end surface of the second flanged member when assembled together with said corresponding second flange member, the outermost abutment point being the abutment point situated farthest in the radial direction from the central axis of the first flanged member,

said load transferring surface has an innermost abutment point in a cross section of the first flanged member, the innermost abutment point configured to abut against the end surface of the second flanged member when assembled together with said corresponding second flange member, the innermost abutment point being the abutment point situated nearest in the radial direction from the central axis of the first flanged member; and

a boring passing through the end surface of the first flanged member at a radial distance from a central axis of the first flanged member greater than the radial distance from the central axis of the first flanged member to the innermost abutment point, and less than the radial distance from the central axis of the first flanged member to the outermost abutment point.

12. (Currently Amended) The joint according to claim 11, wherein both of the first and second flanged members each have a concave end load transferring surface.

13. (Currently Amended) The joint according to claim 11, wherein said end surfaces facing each other the load transferring surface of the first flanged member faces the load transferring surface of the second flanged member before assembly are and is inclined in the radial direction outwards to form an angle in radial cross-section, the angle being such that a distance between the two end load transferring surfaces increases in the radial direction outwards, at least one of said inclined end load transferring surfaces being concave.

14. (Previously Presented) The flanged member according to claim 5, wherein said concave surface has more than one radii of curvature.

15. (New) The flanged member according to claim 1, wherein the first load transferring surface is configured to contact directly said second end surface.

16. (New) The joint according to claim 11, wherein said load transferring surfaces of each of the first and second flanged members is configured to directly contact the load transferring surface of the remaining flanged member.

17. (New) The flanged member according to claim 1, wherein the at least the portion of the first load transferring surface in the unstressed condition that is concave comprises a majority of the first load transferring surface.